Flammable Liquids,'' or other standard specified by the Commandant.

[CGD 85–080, 61 FR 922, Jan. 10, 1996, as amended at 62 FR 51352, Sept. 30, 1997]

§ 119.465 Ventilation of spaces containing diesel machinery.

(a) A space containing diesel machinery must be fitted with adequate means, such as dripproof ventilators, ducts, or louvers, to provide sufficient air for proper operation of main engines and auxiliary engines.

(b) Air-cooled propulsion and auxiliary diesel engines installed below deck, as permitted by §119.420 of this part, must be fitted with air supply ducts or piping from the weather deck. The ducts or piping must be so arranged and supported to be capable of safely sustaining stresses induced by weight and engine vibration and to minimize transfer of vibration to the supporting structure. Prior to installation of ventilation system for such engines, plans or sketches showing machinery arrangement including air supplies, exhaust stack, method of attachment of ventilation ducts to the engine, location of spark arresting mufflers and capacity of ventilation blowers must be submitted to the cognizant OCMI for approval.

(c) A space containing diesel machinery must be fitted with at least two ducts to furnish natural or powered supply and exhaust ventilation. The total inlet area and the total outlet area of each ventilation duct may not be less than one square inch for each foot of beam of the vessel. These minimum areas must be increased as necessary when the ducts are considered as part of the air supply to the engines.

(d) A duct must be of rigid permanent construction, which does not allow any appreciable vapor flow except through normal openings, and made of the same material as the hull or of noncombustible material. The duct must lead as directly as possible from its intake opening to its terminus and be securely fastened and supported.

(e) A supply duct must be provided with a cowl or scoop having a free area not less than twice the required duct area. When the cowl or scoop is screened, the mouth area must be increased to compensate for the area of the screen wire. A cowl or scoop must be kept open at all times except when the weather is such as to endanger the vessel if the openings are not temporarily closed.

(f) Except as required by §116.610(f) of this chapter, dampers may not be fitted in a supply duct.

(g) A duct opening may not be located where the natural flow of air is unduly obstructed, adjacent to possible sources of vapor ignition, or where exhaust air may be taken into a supply duct.

(h) Provision must be made for closing all supply duct cowls or scoops and exhaust duct discharge openings for a space protected by a fixed gas extinguishing system. All closure devices must be readily available and mounted in the vicinity of the vent.

[CGD 85–080, 61 FR 922, Jan. 10, 1996, as amended at 62 FR 51352, Sept. 30, 1997]

§ 119.470 Ventilation of spaces containing diesel fuel tanks.

(a) Unless provided with ventilation that complies with §119.465 of this part, a space containing a diesel fuel tank and no machinery must meet one of the following requirements:

(1) A space of 14 cubic meters (500 cubic feet) or more in volume must have a gooseneck vent of not less than 65 millimeters (2.5 inches) in diameter; or

(2) A space of less than 14 cubic meters (500 cubic feet) in volume must have a gooseneck vent of not less than 40 millimeters (1.5 inches) in diameter.

(b) Vent openings may not be located adjacent to possible sources of vapor ignition.

Subpart E—Bilge and Ballast Systems

§ 119.500 General.

(a) A vessel must be provided with a satisfactory arrangement for draining any watertight compartment, other than small buoyancy compartments, under all practicable conditions. Sluice valves are not permitted in watertight bulkheads.

(b) Special consideration may be given to vessels, such as high speed

craft, which have a high degree of subdivision and utilize numerous small buoyancy compartments. Where the probability of flooding of the space is limited to external hull damage, compartment drainage may be omitted provided it can be shown by stability calculations, submitted to the cognizant OCMI, that the safety of the vessel will not be impaired.

§ 119.510 Bilge piping system.

A vessel must be provided with a piping system that meets § 56.50–50 in subchapter F of this chapter, with the following exceptions:

(a) The space forward of the collision bulkhead need not be fitted with a bilge suction line when the arrangement of the vessel is such that ordinary leakage may be removed from this compartment by the use of a hand portable bilge pump or other equipment, and such equipment is provided; and

(b) The vessel need not comply with § 56.50–50(f) in subchapter F of this chapter.

[CGD 85–080, 61 FR 922, Jan. 10, 1996, as amended by CGD 97–057, 62 FR 51047, Sept. 30, 1997]

§ 119.520 Bilge pumps.

(a) Each vessel must be provided with bilge pumps in accordance with § 56.50–55 in subchapter F of this chapter, with the following exceptions:

(1) Note 1 in Table 56.50–55(a) is not applicable and should be disregarded; and

(2) A non-self-propelled vessel must comply with § 56.50–55(a) in subchapter F of this chapter instead of § 56.50–55(b).

(b) In addition to the requirements of paragraph (a) of this section, a vessel of not more than 19.8 meters (65 feet) in length must have a portable hand bilge pump that must be:

(1) Capable of pumping water, but not necessarily simultaneously, from all watertight compartments; and

(2) Provided with suitable suction and discharge hoses capable of reaching the bilges of each watertight compartment, and discharging overboard.

(c) A second power pump is an acceptable alternative to a hand pump if it is supplied by a source independent of the first power bilge pump.

§ 119.530 Bilge high level alarms.

(a) Each vessel must be provided with a visual and audible alarm at the operating station to indicate a high water level in each of the following normally unmanned spaces:

(1) A space with a through-hull fitting below the deepest load waterline, such as a lazerette;

(2) A machinery space bilge, bilge well, shaft alley bilge, or other spaces subject to flooding from sea water piping within the space; and

(3) A space with a non-watertight closure , such as a space with a non-watertight hatch on the main deck.

(b) A visual indicator must be provided at the operating station to indicate when any automatic bilge pump is operating.

[CGD 85–080, 61 FR 922, Jan. 10, 1996; 61 FR 20556, May 7, 1996]

§ 119.540 Ballast systems.

Solid and water ballast must comply with the requirements of subpart L of part 116 of this subchapter.

Subpart F—Steering Systems

§ 119.600 General.

A self-propelled vessel must meet the applicable requirements for main and auxiliary steering apparatus in subchapters F (Marine Engineering) and J (Electrical Engineering) of this chapter.

Subpart G—Piping Systems

§ 119.700 General.

Materials used in piping systems must meet the requirements of this subpart and be otherwise acceptable to the cognizant OCMI.

§ 119.710 Piping for vital systems.

(a) Vital systems are those systems that are vital to a vessel's survivability and safety. For the purpose of this part the following are vital systems:

(1) Fuel systems;

(2) Fire main;

(3) CO_2 and Halon systems;

(4) Bilge system;

(5) Steering system;